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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BLAKE, CAROLYN T	
ART UNIT	PAPER NUMBER
3724	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/763,873	LEMBO ET AL.	
	Examiner	Art Unit	
	Carolyn T. Blake	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32 and 34* is/are pending in the application.

4a) Of the above claim(s) *9,10,12 and 17-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,11,13-16,28-32 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment and remarks filed on December 21, 2006.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8, 13-16, 28-32, and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the limitation requiring "the cutting portions are oriented perpendicular to a surface of the rotary die cutting cylinder" (lines 10-11) constitutes new matter because it was not described or shown in the original disclosure. Since the surface of the cylinder is rounded, the cutting portion cannot be perpendicular to any of the cylinder's surfaces.

Regarding claim 34, the limitation requiring "the thermal insulation blanket or batt material is fiber glass having a thickness of 4 to 7 inches, the cutting blade has a 1.5 inch depth for cutting the thermal insulation blanket or insulation batt material" (lines 1-

3) constitutes new matter because it was not described or shown in the original disclosure.

Claim Rejections - 35 USC § 103

5. Claims 1, 4, 5, 8, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie (6,119,439) in view of Schulz (4,444,080).

Stevie discloses an apparatus capable of manufacturing insulation substantially as claimed, including: a conveying means for conveying a web; a rotary die cutting cylinder (22) located along a path of the conveying means and having at least one cutting rule (42) that severs said web, and having at least one a perfing rule (40), wherein the rotary die cutting cylinder is capable of compressing the web so that a single rule is capable of completely severing a plurality of different materials having a range of thicknesses; and an anvil (20) cooperative with said rotary die cutting cylinder (22) for perforating and severing said web. Some compression of the work piece is inherent in any cutting process.

Stevie fails to disclose the perfing rule has a plurality of unstepped regions comprising rectangular cutting portions along an edge, with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions. However, Schulz (4,444,080) discloses a perfing rule (5) that has a plurality of unstepped regions comprising rectangular cutting portions (6) along an edge (5b) of the perfing rule for perforating a web (4), with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions, wherein the cutting portions are oriented perpendicular to the surface of the rotary die cutting cylinder (1), and the

stepped regions are not sharpened so that a cutting depth of the stepped regions ranges from zero to one half of a thickness of said work piece (see perforations 3 on web). The Schulz cutting edge would create a different perforation line in a work piece than the Stevie cutting edge. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a perfing rule with rectangular teeth, as taught by Schulz, on the Stevie apparatus in order to create a desired perforation line on a work piece.

Regarding claim 4, Stevie discloses the rotary die cutting cylinder (22) includes three perfing or slicing rules (20) and one cutting rule (42).

Regarding claim 5, Stevie discloses the rotary die cutting cylinder (22) includes two cutting rules (42) and six perfing rules (40) with steps (46) along a length thereof. The teeth (40) of the Stevie reference can be considered "steps" as claimed because they form an uneven, discontinuous, jagged cutting edge.

Regarding claim 8, Stevie discloses wherein the perfing or slicing rules (40) and at least one cutting rule (42) are removable. See the fasteners attaching the rules in FIG 1.

Regarding claim 28, Stevie discloses the rotary die cutting cylinder (22) is oriented relative to the conveying means so that the web is partially sliced, perforated, or severed transversely.

Regarding claims 29 and 30, the ratio of unstepped region width to stepped region width appears to be 2:1 in the Schulz device. To the extent this can be argued, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the ratio in order to create a desired perforation line on a work piece.

Regarding claim 31, Stevie discloses the anvil (20) is a cylindrical roller.

Regarding claim 32, Stevie discloses the anvil (20) has a flat cutting surface (such as 26).

Regarding claim 33, the Stevie rotary die cutting cylinder would inherently compress insulation during cutting.

6. Claims 1-5, 8, 28-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (4,781,091) in view of Schulz and Schulz.

Regarding claim 1, Nakaya discloses an apparatus capable of manufacturing insulation substantially as claimed including: a conveying means (4) for conveying a web; a rotary die cutting cylinder (2) located along a path of the conveying means (4) and having one slicing rule (8) and at least one cutting rule (8); and an anvil (3) cooperative with said rotary die cutting cylinder (2) for severing said web.

Nakaya fails to disclose a perfing rule or a slicing rule that partially cuts through the insulation. Stevie discloses a rotary cutting cylinder (22) having at least one cutting rule (42) that severs and at least one perfing rule or slicing rule (40) that partially cuts through a work piece. The Stevie cutting cylinder and arrangement of perfing and cutting blades creates a different cutting pattern on the work product than that created by the Nakaya cutting cylinder. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include perfing or slicing

rules, as taught by Stevie, with the Nakaya cutting cylinder and apparatus for the purpose of creating a different work product.

Still, the modified Nakaya device fails to disclose the perfing rule has a plurality of unstepped regions comprising rectangular cutting portions along an edge, with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions. However, Schulz discloses a perfing rule (5) that has a plurality of unstepped regions comprising rectangular cutting portions (6) along an edge (5b) of the perfing rule for perforating a web (4), with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions, wherein the cutting portions are oriented perpendicular to the surface of the rotary die cutting cylinder (1), and the stepped regions are not sharpened so that a cutting depth of the stepped regions ranges from zero to one half of a thickness of said work piece (see perforations 3 on web). The Schulz cutting edge would create a different perforation line in a work piece than the Stevie cutting edge. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a perfing rule with rectangular teeth, as taught by Schulz, on the modified Nakaya apparatus in order to create a desired perforation line on a work piece.

Regarding claim 2, Nakaya discloses two adjacent conveyor belts (4 and 5).

Regarding claim 3, Nakaya discloses the rotary die cutting cylinder (2) and anvil (3) are located intermediate the two conveyor belts (4 and 5).

Regarding claim 4, Stevie discloses the rotary die cutting cylinder (22) includes three perfing or slicing rules (20) and one cutting rule (42).

Regarding claim 5, Stevie discloses the rotary die cutting cylinder (22) includes two cutting rules (42) and six perfing rules (40) with steps (46) along a length thereof. The teeth (40) of the Stevie reference can be considered "steps" as claimed because they form an uneven, discontinuous, jagged cutting edge.

Regarding claim 8, the rules of Stevie are removable. See the fasteners securing the rules in FIG 1.

Regarding claim 28, Nakaya discloses the rotary die cutting cylinder (2) is oriented relative to the conveying means so that the web is severed transversely.

Regarding claims 29 and 30, the ratio of unstepped region width to stepped region width appears to be 2:1 in the Schulz device. See FIG 15. To the extent this can be argued, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the ratio in order to create a desired perforation line on a work piece.

Regarding claim 31, Nakaya discloses the anvil (3) is a cylindrical roller.

Regarding claim 33, the Nakaya rotary die cutting cylinder would inherently compress insulation during cutting.

7. Claims 7, 11, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie in view of Schulz as applied to claim 1 above, and further in view of the following.

Stevie fails to disclose the dimensions of the device. However, to create a cutting device with the dimensional parameters claimed would have been obvious to

one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

8. Claims 7, 11, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Schulz as applied to claim 1 above, and further in view of the following.

The modified Nakaya device fails to disclose the dimensions of the device. However, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevie in view of Schulz as applied to claims 1 and 11 above, and further in view of the following.

The modified Stevie device teaches six perfing or slicing rules (40) and two cutting rules (42), but fails to disclose the pattern of blades disclosed and the dimensions of the device. Varying the type, number, and pattern of the blades creates a different work product. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a different pattern of rules for the purpose of creating a different work product. In addition, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Schulz as applied to claims 1 and 11 above, and further in view of the following.

Stevie discloses six perfing or slicing rules (40) and two cutting rules (42). The modified Nakaya invention still fails to disclose the pattern of blades disclosed and the dimensions of the device. Varying the type, number, and pattern of the blades creates a different work product. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a different pattern of rules for the purpose of creating a different work product. In addition, to create a cutting device with the dimensional parameters claimed would have been obvious to one of ordinary skill in the art for the purpose of spatial constraints, work piece dimensions, or available tooling.

11. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Stevie and Schulz as applied to claim 1 above, and further in view of Ohara (5,695,105).

The modified Nakaya device fails to disclose means for tearing. However, Ohara discloses means for automatically tearing separable segments apart wherein the tearing means includes for conveying a first and second adjacent separable segments at different speeds to tear the first and second segments apart from each other. See col. 1, lines 33-40. This method could be easily implemented in the Nakaya device due to the location of the two conveyors (4 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to move the Nakaya

conveyors at different speeds, as taught by Ohara, for the purpose of separating segments.

Response to Arguments

12. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's argument that the prior art cited does not teach a thermal insulation blanket or insulation batt material, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-4503. The examiner can normally be reached on Monday to Thursday, 7:00 AM to 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CB
March 13, 2007

BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER